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United States Senate

COMMITTEE ON APPROPRIATIONS  
WASHINGTON, DC 20510-6025

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January 27, 1997

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

The Honorable William E. Kennard  
Chairman  
Federal Communications Commission  
1919 M Street, N.W.  
Washington, DC 20554

Re: CC docket 96-4<sup>5</sup>

Dear Bill:

Senator Conrad Burns and I hereby submit public comment on the report mandated by Congress in Sec. 623 of the Commerce, Justice, State, and the Judiciary Appropriations Act of 1996. Please accept these late filed comments and grant a waiver for their inclusion in the public record.

With best wishes,

Cordially,

  
TED STEVENS

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## United States Senate

COMMITTEE ON APPROPRIATIONS

WASHINGTON, DC 20510-6025

January 26, 1998

The Honorable William E. Kennard  
 Chairman  
 Federal Communications Commission  
 1919 M Street, N.W.  
 Washington, D.C. 20554

Dear Bill:

We are writing to express our views on the issues the Commission has been asked to address in a report to Congress pursuant to section 623 of Public Law 105-119, and request that this letter be included as part of the public record of that report. As sponsors of section 623, We feel it is critical that the Commission use this report as an opportunity to review and revise its implementation of critical amendments Congress made to the Communications Act of 1934 when it enacted the Telecommunications Act of 1996. Without revision, the Commission's current policies will seriously undermine the universal service, competitive neutrality, and local competition goals that were at the heart of the Telecommunications Act amendments.

The Telecommunications Act added section 254 to the Communications Act for the specific purpose of "preserving and advancing universal service" well into the 21<sup>st</sup> century. Universal service is defined in section 254 as "an evolving level of telecommunications services" that provides access to "advanced telecommunications and information services." We are greatly concerned that, left unchanged, the Commission's current interpretations of both the statutory definitions and section 254 will result in rural and high cost areas of the Nation being denied the very services this statutory mandate sought to achieve. Set out below are specific concerns with respect to each area the Commission is asked to address in the report.

### The Definitions

Recognizing that the pre-Telecommunications Act regulatory structure had evolved based on the monopoly model and the Communications Act definition of "common carrier," Congress chose not to use the term "common carrier" to define the new rights and responsibilities of communications providers under the

Telecommunications Act. Instead, Congress added new definitions to the Communications Act to respond to the convergence of communications and computer technology and to provide the framework for the new competitive local communications world. "Information service" was added to describe the many new computer-based services that are becoming increasingly important as a means of commerce and education. "Telecommunications service" and "telecommunications carrier" became the new keys to rights and responsibilities of communications providers in the post-monopoly world.

The new definitions are the key to the changes effected by the Telecommunications Act. The most important of these new definitions are "telecommunications," "telecommunications service," and "telecommunications carrier." In addition, the Telecommunications Act amended the definition of "telephone exchange service,"<sup>1</sup> a term already defined by the Communications Act,<sup>2</sup> to reflect the changes intended to be encompassed by the other new definitions. All of the central provisions of the Telecommunications Act are applicable to "telecommunications carriers" and the provision of "telecommunications services." If these new definitions are construed very narrowly, as the recent decisions of the Commission indicate, then the "major overhaul" of the Communications Act that Congress expected from the Telecommunications Act could turn out to be nothing more than a footnote in history.

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<sup>1</sup> "Telephone exchange service" is defined as "(A) service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommuting service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge, or (B) comparable service provided through a system of switches, transmission equipment, or other facilities (or combination thereof) by which a subscriber can originate and terminate a telecommunications service." 47 U.S.C. 153(47) (Supp. 1997). The 1996 Act added clause (B), which would not have been necessary had Congress intended to limit telephone exchange service to traditional voice telephony. The new definition was included to ensure that the definition of local exchange carrier, which hinges in large part on the definition of telephone exchange service, was not made useless by the replacement of circuit switched technology with other means—for example packet switches or computer intranets—of communicating information within a local area.

<sup>2</sup> Prior to amendment the definition of "telephone exchange service" read as follows; a "service within a telephone exchange, or within a connected system of telephone exchanges within the same exchange area operated to furnish to subscribers intercommuting service of the character ordinarily furnished by a single exchange, and which is covered by the exchange service charge." 47 U.S.C. 153(r) (1991).

Our greatest concern is that the Commission continues to apply concepts developed in an inflexible, monopoly environment to the flexible, post-local-monopoly world that the Telecommunications Act was intended to create. The Commission's continued classification of services as "enhanced"<sup>3</sup> or "basic"<sup>4</sup> could seriously undermine the competitive regime Congress sought to create. Although some members of industry may support the Commission's approach in a shortsighted effort to obtain relief from access charges and other outdated regulatory structures, they are likely to be disappointed with the long-term result. More to the point, the Telecommunications Act provided the Commission with the legal flexibility it previously lacked<sup>5</sup>, making it unnecessary for the Commission to continue applying its outdated "enhanced/basic" regime.

The Communications Act defined the term "common carrier," and provided the rules to regulate them under title II of that Act. If Congress had intended the term "telecommunications carrier" to mean "common carrier," there would have been no need to add this new term. Congress, though, did intend "telecommunications carrier" to define a class broader than the pre-Telecommunications Act "common carrier" regime. That intent is evident from the definition of a "telecommunications carrier" added by the Telecommunications Act.<sup>6</sup> Congress's intent is also evident from the expansive forbearance authority provided in new section 10 of the Communications Act. A "telecommunications carrier" includes "any provider . . . that offers the transmission of information of the user's choosing . . . for a fee directly to the public . . . regardless of the facilities used."<sup>7</sup> Congress added this sweeping definition to account for the continued convergence of technology, to promote the removal of barriers to entry, and to achieve competitive neutrality.<sup>8</sup>

### Application of the Definitions to Hybrid Services

Contrary to the Commission's position that the statutory definition of "telecommunications" resembles its longstanding regulatory definition of "basic service," the term "telecommunications carrier" has no history or precedent either in the

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<sup>3</sup> 47 C.F.R. 64.702.

<sup>4</sup> See *In the Matter of Amendment of Section 64.702 of the Commission's Rules and Regulations (Second Computer Inquiry)*, 77 F.C.C.2d 384 (1980), *modified*, 84 F.C.C.2d 50 (1980), *further modified on reconsideration*, 88 F.C.C.2d 512 (1981) [hereinafter *Computer II*].

<sup>5</sup> See new section 10 of the Communications Act, 47 U.S.C. 160 (1997).

<sup>6</sup> A telecommunications carrier is only a common carrier to the extent that it provides telecommunications service. 47 U.S.C. § 153(44) (Supp. 1997).

<sup>7</sup> 47 U.S.C. §§ 153(44),(43),(46) (Supp. 1997).

<sup>8</sup> The FCC took a step in the right direction when it concluded in the Universal Service Order that some non-common carrier communications providers, such as commercial mobile service providers and paging services, are in fact "telecommunications carriers." See *In the Matter of Federal-State Joint Board on Universal Service*, Dkt. No. 96-45, FCC97-157 [hereinafter *Universal Service Order*] at 780.

Commission's rules or in court decisions.<sup>9</sup> Instead, the definition of "telecommunications carrier" is based in part on a two-prong test outlined in NARUC II.<sup>10</sup> First, the NARUC II court examined whether a service provider "holds [itself] out to serve indifferently all potential users" and noted that "it is the practice of such indifferent service that confers common carrier status."<sup>11</sup> Second, the court examined whether "the system be such that customers 'transmit intelligence of their own design and choosing'"<sup>12</sup> and determined that a use "in which the customer explicitly or implicitly determines the transmission or content" of the message satisfies this prong.<sup>13</sup>

The statutory term "telecommunications carrier" is even broader than the NARUC II court's conception. The phrases "any provider" and "regardless of the facilities used" make it plain that Congress intended the provision to include anyone engaged in the transmission of "information of the user's choosing."<sup>14</sup> Changes that are made to the user's information during transmission—for example the addition of information regarding message routing or protocol conversion to enable the message to be transmitted between two computers, two phones, or some combination thereof—are not relevant to the determination of the provider's status. If the information chosen by the user has the same form (e.g., typewritten English) and content (e.g., directions to Washington, D.C.) as "sent and received" then a "telecommunication" has occurred.<sup>15</sup> In the case of the Commission's regulatory definition of "enhanced services," the inclusion of "computer processing applications that act on the format, content, code, protocol, or other similar aspects of the subscriber's information . . ." results in the transmission being classified as an enhanced service. In the case of the statutory definition, Congress specifically limited the analysis to changes that affect the "form or content of the information as sent and received." Computer processing applications that affect the "*format...code, protocol, or other similar aspects of the subscriber's information*"<sup>16</sup> during the transmission, or even as received, were deliberately not included the statutory criteria. In addition, it should be noted that Congress also did not include "protocol conversion" in the statutory definition of "information service." Again this was not an accident. Congress recognized the fact that increasingly all communications and computer applications will invariably involve protocol conversion.

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<sup>9</sup> U.S. v. AT&T, 552 F. Supp. 131 at 229 (D.D.C. 1982) (Modification of Final Judgment), for instance, defines the term "telecommunications" but not the term "telecommunications carrier."

<sup>10</sup> National Association of Regulatory Utility Commissioners (NARUC) v. Federal Communications Commission, 533 F.2d 601 (D.C. Cir. 1976).

<sup>11</sup> NARUC, 533 F.2d at 608.

<sup>12</sup> *Id.*, quoting Industrial Radiolocation Service, 5 F.C.C. 2d 197, 202 (1966).

<sup>13</sup> *Id.* at 609.

<sup>14</sup> 47 U.S.C. § 153(43) - (44) (Supp. 1997).

<sup>15</sup> 47 U.S.C. § 153(43) (Supp. 1997).

<sup>16</sup> See 47 C.F.R. 64.702 (1997).

Most importantly, the statutory definition does not say that the "telecommunications carrier" must be engaged *solely* in offering "telecommunications for a fee." Indeed, the definition plainly contemplates that telecommunications carriers will offer services other than "telecommunications services." That is why the definition provides that "a telecommunications carrier shall be treated as a common carrier under [the 1934] Act only to the extent that it is engaged in providing telecommunications services . . . ."<sup>17</sup> The definitions are not mutually exclusive because Congress did not want to adopt the Commission's "contamination" theory – the concept that if a telecommunications service is combined with an information service the telecommunications portion is "contaminated" and therefore the whole transaction must be regulated only as an information service. Language that specifically stated that a telecommunications service did not include an information service was struck before the final definitions were adopted.

Likewise, the term "only" was added to the final definition to make it clear that a telecommunications carrier should be treated as a common carrier "only to the extent that it is engaged in providing telecommunications services." This language was included in specific recognition of the fact that a telecommunications carrier may also be providing information services, cable services, or broadcasting services under the Communications Act. Nothing in the statutory language indicates nor supports an interpretation that concludes that the bundling of telecommunications and information services in a single package sold for a fee to the public results in the ability of a provider to escape the specific statutory requirements of the Communications Act.

An information service provider that offers a hybrid service directly to the public for a fee is also offering "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or content of the information as sent and received." The relationship of the information services provider offering a hybrid service to the customer determines whether an information service provider is also a "telecommunications carrier." The type of facility<sup>18</sup> used by the information service provider to make the transmission is irrelevant. Under the definition of "telecommunications carrier," a provider's status does not depend on the type of facilities used. As long as the information service provider is the entity offering the transmission, as part of its for-a-fee hybrid service, the statutory definitions do not prevent the information service provider from also being classified as a "telecommunications carrier" to the extent that it provides transmission services.<sup>19</sup>

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<sup>17</sup> 47 U.S.C. § 153(44).

<sup>18</sup> Such facilities include the ISP's own facilities, leased facilities, private lines, wireless facilities, cable facilities, broadcast facilities, and common carrier facilities.

<sup>19</sup> Congress's decision not to define "information service provider" reflects the fact that Congress did not intend to create a separate class of communications providers. Rather, Congress included the term "information service" in order to recognize certain services that have generally been treated as unregulated services, but which are provided by telecommunications carriers, common carriers, and other entities regulated under the 1934 Act.

In summary, we believe Congress clearly did not intend "information service" and "telecommunications service" to have the same meaning as the Commission's regulatory definitions of "enhanced" and "basic" services. If this were Congress' intention, the conference committee would have adopted the Senate's definition of "information service" and the House's definition of "telecommunications service" and deleted "telecommunications carrier" entirely.<sup>20</sup> Instead Congress created an innovative new framework to provide rights and responsibilities in a competitive world. Those rights and responsibilities attach to "telecommunications carriers," not just to "common carriers," which is the term Congress would have used had it merely intended to codify the Commission's prior practice.

### **Impact of the Definitions and their Application to Hybrid Services on Universal Service**

The foregoing discussion regarding the definitions and their application to hybrid services has tremendous ramifications for the Commission's ability to effectively implement section 254 as Congress intended. Access to the Internet is probably the best example of how the Commission's present approach will result in the ultimate frustration of the clear and unambiguous intent of section 254. The Commission in the Universal Service Order concludes that Internet access services are information services and not telecommunications services. In paragraphs 443 and 444 of its Universal Service Order the Commission defines "conduit" service for the provision of access to the Internet. The Commission arrives at its definition of "conduit" service by adopting three services that Congress *excluded* from the definition of electronic publishing (which is a subset of information service).

We are surprised by the Commission's logic. The three services that compose "conduit" service according to the Commission are

the transmission of information as a common carrier;

the transmission of information as part of a gateway to an information service, where that transmission does not involve the generation or alteration of the content of information but may include data transmission, address translation, protocol conversion, billing management, introductory information content, and navigational systems that

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<sup>20</sup> The FCC seems to believe that this is exactly what the conference did, notwithstanding clear statutory and legislative evidence to the contrary. In paragraph 785 of the Universal Service Order, the FCC states that "telecommunications services . . . is intended to encompass only telecommunications provided on a common carrier basis. This conclusion is based on the Joint Explanatory Statement . . ." Unfortunately the referenced passage in the Joint Explanatory Statement is on page 115, which describes the definition of "telecommunications services" in the House amendment to S. 652. Page 116 of the Joint Explanatory Statement describes the conference report, and states that the House receded to the Senate definition with amendment of "telecommunications service". In Universal Service Order ¶ 789, the FCC once again states that "[the definition of enhanced services is substantially similar to the definition of information services," citing its earlier action in *Non-Accounting Safeguards First Report and Order*, ¶ 102.

enable users to access information services that do not affect the presentation of such information services to users; and

electronic mail services (e-mail).

All three of those services were excluded precisely because they are telecommunications services! In fact, "the transmission of information as a common carrier" is the classic definition of "basic" service under the Commission's own regulatory definition. In the second category, gateway services, the definition itself makes it clear that it is not an information service, in that it refers to providing access to an information service, without affecting the "generation or alteration of the content... [or] the presentation [form] of such information services to users." Finally, as outlined below, e-mail is nothing more or less than a paperless fax, and thus is rightly not considered an information service.

What concerns us greatly is the tremendous impact on universal service if you carry the Commission's flawed concept of conduit service and Internet access forward even 5 years. If Internet conduit service is not a telecommunications service, then that service can never be supported as part of universal service under the terms of section 254. This means that rural and high cost consumers will be denied access to the very technology that the Commission and everyone else fully expects will become the centerpiece of modern communications, education, and commerce in the early 21<sup>st</sup> century. What good will it do schoolchildren in rural Montana or Alaska to have access to the Internet through their schools and libraries if they cannot hope to affordably access the same technology at their home? How will the very specific goals of section 254(b) be met if something as basic as Internet access is not a telecommunications service eligible for universal service support under section 254? Clearly the Commission needs a more consistent and comprehensible formulation of the definitions if the changes made by the Telecommunications Act are going to have any relevance to modern communications in the 21<sup>st</sup> century.

### **The Impact of Exemptions from Universal Service Contributions**

The Commission's flawed interpretation of the definitions also has grave impacts on the long-term viability of the infrastructure needed to make universal service possible. Both the Universal Service Order and its Access Charge Order the Commission furthers the concept that the Internet is a separate communications network that does not use or impact the "public switched telecommunications network (PSTN)." Internet users use the PSTN to reach their information service provider (ISP) in exactly the same way that they do when they make a long distance call using an interexchange carrier (IXC) like AT&T, MCI, or any other long distance carrier. The Commission itself has repeatedly recognized this fact since it first created the ISP access charge exemption in 1983.

In fact, an Internet user keeps the switch and circuit open to their house much longer than the long distance caller does. As an example, consider the case of a person who makes a 2 hour long distance call from their house in Washington, D.C. to the house of a friend in Bozeman, Montana. Suppose that the call is made using AT&T at a rate of



12 cents per minute. The call would cost the consumer \$14.40, not including the daily cost of local phone service. Now suppose instead that the two friends had the same two hour conversation from their homes via the Internet – either by on-line e-mail, voice, or video (depending on what kind of computer software or ISP service they have purchased). This time the call would cost each of them 71 cents, or \$1.42 total, not including the cost of local phone service, if you assume that each of them pays \$20 per month to an ISP. If the call was made using newly available Internet phone technology that allows computer to phone, or even phone to phone calls, the cost would be only 71 cents, since only the caller would need to sign up for ISP service. In both cases the same information is conveyed in the same time span – but under the Commission's current rules the traditional voice call costs between 10 and 20 times more. This tremendous price differential will not remain unexploited for long. In fact, as recent offers by AT&T, Qwest Communications Corporation and Net2Phone clearly indicate, companies are moving quickly to exploit this regulatory imbalance. (See Attachments)

Proponents of separate regulatory treatment for Internet communications argue that this price differential reflects the "more efficient" nature of the packet switching technology used in the "Internet backbone." While this may be true in some cases, it is not relevant to the issue at hand. The "Internet backbone" employs routers to channel traffic over fiber optic networks, which in many cases may also be carrying voice and data traffic from circuit switches that are part of the PSTN. Increasingly, IXCs are using packet switching technology like ATM to carry backbone traffic, so the distinction – if it in fact should exist at all – between the "Internet backbone" and the PSTN is rapidly disappearing. Let us even stipulate for the purposes of the section 623 report that ISPs and IXCs both pay the full cost of the infrastructure to carry traffic between the two central offices. Where the difference between the two exists is in what they pay for the support of the most expensive part of the infrastructure – the switches and local loops that physically connect each house to the world-wide communications infrastructure.

In both cases – IXC and ISP communication – the impact on the local phone system is the same because the local loop from each house to its respective central office and the switches in those offices are held open for the duration of the communication. Yet the two hour phone call costs the consumer making it \$14.40, while the Internet call costs that same consumer 71 cents. Under the Commission's access charge rules, roughly 45 percent of the \$14.40 the consumer pays to the IXC for that particular call goes to the two local exchange carriers who supply the local loop and central office switches that are held open the entire time. This means that the local exchange carriers receive \$6.48 from the consumer for that call, which is then used to offset the cost to the local consumer of the infrastructure used to make that call. Under the same access charge rules, which currently exempt all ISPs from having to pay access charges, the local exchange carrier receives nothing from the ISP or the consumer for the call, which held the local loop and switches open for the same two hours to convey the same information.

The efficiency that ISPs claim occurs through the use of the TCP/IP protocol, routers, and packet switching affect only the interstate portion of the transmission, which is not the expensive part of the communications infrastructure that section 254 is

designed to preserve and advance. It is the local infrastructure, the capillary system from each central office that physically connects each home and business to the network, that universal service supports. We do not yet have packet switching to the home, and likely never will if the Commission maintains its current, outdated regulatory regime. Further, packet switching has no impact on the greatest component of infrastructure cost, the local loop of copper wire that physically connects the central office to each home or business. According to information provided to Congress, the average cost per loop for one Regional Bell Operating Company (RBOC) is \$48 per loop per month. Yet that same RBOC receives only \$27 per month (including revenue from vertical services like voice mail, etc.) from the average residential consumer for that loop. The remaining \$21 dollars in local loop costs are recovered through a combination of access charges and cross subsidy from business consumers. The same RBOC recovers on average only \$44 per month per loop from each business customer, which is still \$4 dollars per month less than the cost. However, the RBOC gets on average \$13 per month per loop in access charges, which provides an average of \$9 per month per business line for use in subsidizing residential loop costs. In high cost and rural areas, these cost figures are even greater. For example, the average cost in some areas of rural Alaska is \$152 per loop per month.

Internet users depend on the same physical infrastructure to reach the databases, computer servers, and other users that comprise the Internet that more traditional circuit switched voice and data users depend on to reach the telephones, fax machines, and other users that make up the PSTN. All of these communications keep a circuit switch open for at least part of the communication. More importantly, all depend on the same physical connection from home or office to transmit the information. Yet only the traditional circuit switched voice and fax traffic must pay for the bulk of the cost of supporting the physical infrastructure and circuit switches. As more and more traffic is "switched" to the Internet a decreasing amount of traditional circuit switched traffic will have to pay increasing costs under the current rules in order to continue to support the physical network. Eventually, there will no longer be enough money to support the infrastructure needed to make universal access to voice or Internet communications possible, and the system will collapse. This clearly is not consistent with the unambiguous intent of section 254.

### **Charges**

None of the above discussion means that we support applying the current access charge regime to Internet communications. Such drastic action is unnecessary and would run counter to the goal of universal service. Federal and State universal service mechanisms, including access charges, currently collect enough money to support the physical infrastructure today. However, if the current Commission exemptions from universal service contributions and access charges remain unchanged, that will not be the case tomorrow. And that is what section 254 sought to deal with – ensuring that as the local exchange monopoly is opened to competition that universal service is preserved and advanced in a competitively neutral fashion. It is not a matter of collecting more money, rather it is a matter of redistributing how the money is collected, so that the new rules do

not favor some forms of communication over others that use the same physical infrastructure. The statutory language of section 254(d) is unambiguous and clear – all telecommunications carriers must contribute. Congress intended to cast this net widely in order to ensure that all of those who make use of the network, and in particular the physical infrastructure needed to provide universal access, contribute to its upkeep.

Perhaps in the end the Commission will decide that both IXC's and ISPs should pay a flat monthly fee per subscriber for universal service. Under such an approach business subscribers could continue to be assessed a higher fee than residential subscribers, if such an approach is still needed to make residential service affordable. In the end, any system of universal service support – whether through a reformed access charge system or otherwise – should only collect the amount of money needed to support the physical infrastructure, and should be structured to encourage continued deployment of modern communications technology to homes and offices throughout the Nation.

It is also within the Commission's authority to rule that ISPs offer "telecommunications services" but use its broad forbearance power granted by Congress to give the Commission time to determine an appropriate contribution.

#### **Consistency of the Commission's Interpretation of Section 254**

With respect to the Commission's interpretation of the different subsections and paragraphs of section 254 we can find no support in the plain meaning of the statute or the legislative history for the Commission's interpretation of section 254(h)(2)(A). It is Commission's own decision to continue to apply its outdated regulatory definitions and contamination theory concept that has forced it to this bizarre and legally untenable result. On one hand the plain statutory language and legislative history of section 254(h) make it clear that Congress intended schools and libraries to have access to Internet services. On the other hand the plain, unambiguous language of sections 254(c) and 254(e) make it clear that universal service support is only available for the provision of "telecommunications services" and may only be provided to "eligible telecommunications carriers." In fact this intent is so clear that Congress felt it necessary in section 254(h)(1)(B) to waive the statutory limitation in section 254(e) so that any telecommunications carrier could receive support for universal service to schools and libraries. In addition, Congress specifically allowed the Commission under section 254(c)(3) to expand upon the basic definition of universal service to include additional telecommunications services for schools and libraries. Had the Commission concluded, as we believe they should have, that Internet access is a telecommunications service, then there would be no reason for the Commission's strained interpretation of section 254(h)(2)(A).

The Commission cites as the basis for its authority to reach their interpretation of section 254(h)(2)(A) its generic rulemaking authority under section 4(i) of the Communications Act. There is nothing in section 4(i) that provides the authority for the Commission to waive the explicit statutory restriction in section 254(e). Section 4(i) merely provides the authority for the Commission to "perform any and all acts, make

such rules and regulations, and issue such orders, *not inconsistent with this Act*, as may be necessary in the execution of its functions” (emphasis added). Clearly a waiver of an explicit restriction is not consistent with the plain language of the Communications Act. Nothing in section 254(e) says that the limitation only applies to Federal universal service support provided for telecommunications services. To the extent that the Commission’s flawed interpretation of section 254(c)(3) to include information services is in fact correct then the restriction in section 254(e) would still apply on its face to all “specific Federal universal service support.”

The 8<sup>th</sup> Circuit rejected the FCC’s use of its generic authority under sections 4(i) and 303(r) to authorize numerous rules that exceeded the statutory language of sections 251 and 252 or that conflicted with the restriction in section 2(b) of the Act. In *Iowa Utilities Board* the 8<sup>th</sup> Circuit stated that “these subsections merely supply the FCC with ancillary authority to issue regulations that may be necessary to fulfill its primary directives contained elsewhere in the statute. Neither subsection confers additional substantive authority on the FCC.” This view is also expressed in *People of the State of California v. F.C.C.*, 905 F.2d 1217 (9<sup>th</sup> Cir. 1990) at 1240, note 35.

In *FCC v. Midwest Video Corp.*, 440 U.S. 689 (1979), when considering FCC rules regarding cable television that appeared to go beyond what specific statutory provisions permitted the FCC to apply to broadcasters, the Supreme Court stated “[t]hough the lack of Congressional guidance has in the past led us to defer – albeit cautiously – to the Commission’s judgement regarding the scope of its authority, there are strong indications that agency flexibility was to be sharply delimited.” *Id.* at 708. A similar rationale should apply to FCC efforts to use its generic authority under section 4(I) to expand section 254(h)(2)(A) beyond the clear statutory restrictions in the rest of section 254.

Some may argue to the Commission that it should continue to stick by its interpretation, and that the courts should defer to the expert agency. In this case such a strategy will be ultimately unsuccessful, and will seriously damage the implementation of the schools and libraries provision in the process. The Supreme Court has summed up its approach to when courts should defer to agency interpretations as follows:

“When a court reviews an agency’s construction of a statute which it administers, it is confronted with two questions. First, always, is the question whether Congress has directly spoken to the precise question at issue. If the intent of Congress is clear, that is the end of the matter; for the court as well as the agency, must give effect to the unambiguously expressed intent of Congress. If however, the court determines Congress has not directly addressed the precise question at issue, the court does not simply impose its own construction on the statute, as would be necessary in the absence of administrative interpretation. Rather, if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency’s answer is based on a permissible construction of the statute.” *Chevron U.S.A. v. Natural Resources Defense Council*, 467 U.S. 837 at 842-843 (1984).

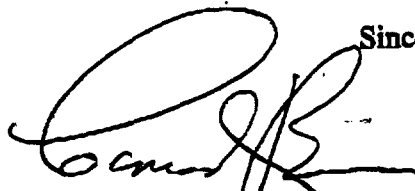
In section 254 Congress did directly address the issues of what services could be supported by universal service, who should contribute, and who may receive such support. The Commission cannot have it both ways. To the extent that it insists on treating all hybrid services as information services and not telecommunications services, then that decision must be followed consistently – with all of its uncomfortable consequences – throughout the Communications Act. The Commission must live within the limits Congress set. We debated and decided in section 254 whether or not information services would be directly supported by universal service, and the answer was clearly not. The Commission cannot use its generic authority to trump the unambiguously expressed intent of Congress.

#### **Allocation of Costs for Universal Service**

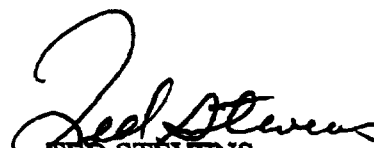
Finally, the Commission should carefully review its decision to only support 25 percent of the costs of universal service in the future. This decision is not consistent with the level of support provided by Federal sources today for many of the smaller local exchange carriers, and also has the potential to adversely impact larger local exchange carriers. Based on the average costs and revenue for one RBOC cited above, universal service support in the form of access charges account for roughly 30 percent of the revenue needed to pay for the cost of local service to residential customers. Using the same figures, access charges account for about 7 percent of the revenue needed for business customers. When the cross subsidy that flows from the additional revenue derived from business customers is taken into account, access charges account for nearly 50 percent of the revenue needed to continue to provide affordable local service. For small local exchange carriers in places like Alaska and Hawaii, Federal universal service support in terms of direct contributions through the National Exchange Carrier Association, Dial Equipment Minute weighting, long term support payments from RBOC and access charges account for nearly 85 percent of the revenue needed to provide affordable local service.

The Commission needs to work with the States to find a way to provide an integrated system of universal service support. Likewise, the Commission needs to work with the States to find a way to clarify the role played by access charges and business to residential cross subsidies in the continued support of the local network, so that the goal of section 254 – to ensure continued access to that infrastructure at affordable rates—is achieved.

Sincerely,



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**"NEW" AT&T UNVEILS INNOVATIVE CONSUMER OFFERS**

*Customers to get unprecedented flexibility and choice in ordering and using AT&T services.*

**FOR RELEASE MONDAY, JANUARY 26, 1998**

**NEW YORK – AT&T today introduced two innovative offers – AT&T WorldNet (sm) Voice and AT&T One Rate (sm) Online – that give consumers unprecedented flexibility and choice in ordering and using AT&T services.**

**Leveraging the company's extensive Internet Protocol (IP) network, AT&T WorldNet Voice begins a limited market trial in the second quarter. It will appeal to consumers interested in the economical calling available in cyberspace – so-called "Internet telephony."**

**Carried over AT&T's IP network, AT&T WorldNet Voice calls will have good sound quality. Experts from AT&T Labs have worked to minimize the delays sometimes associated with Internet telephony calls.**

**"AT&T WorldNet Voice is a major step into the new world of IP-based voice communications," said Gail J. McGovern, executive vice president of the company's consumer markets division.**

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"It is ideal for customers looking for basic, reliable service at the lowest possible price. In the future, we will announce other offers that leverage the synergies of voice and data that the power of AT&T's IP network can unleash."

State-to-state calls will cost from seven-and-a-half to nine cents per minute. The rate will apply 24 hours a day, seven days a week.

When consumers enroll in AT&T WorldNet Voice, they will pre-pay via credit card for a set amount of calling. As they make calls, the service automatically informs them how much credit they have left in their AT&T WorldNet Voice account, which can be replenished at any time.

No computer equipment of any kind is needed to use the service. Callers dial a local access number and, after a prompt, enter their authorization code. They then dial the number they want to call.

The company's other new service, AT&T One Rate Online, can be ordered online beginning in March. It allows consumers to sign up for AT&T long distance service from AT&T's website, [www.att.com](http://www.att.com), and, for a \$1 monthly fee, receive a flat rate of 10 cents a minute on their direct-dialed, state-to-state calls made from home. This promotional rate applies 24 hours a day, seven days a week. AT&T One Rate Online also offers competitive rates to customers who make calling card, in-state, and international calls.

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To get the 10-cents-per-minute rate, consumers order AT&T One Rate Online at [www.att.com](http://www.att.com), agree to have their long distance charges billed to a major credit card, and review their invoices exclusively online.

AT&T WorldNet® Service also announced that it will offer its unlimited usage customers AT&T One Rate Online for just nine cents a minute without the \$1 monthly fee.

"AT&T One Rate Online makes it easier than ever for consumers to order our services. All they need to do is point and click to get a great rate, and they get the added benefit of one less check to write each month," McGovern said.

This virtual method of ordering and billing yields AT&T significant cost savings, enabling it to offer these aggressive rates.

\* \* \*



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**AT&T CHAIRMAN UNVEILS PLANS TO "FUTURE PROOF" WORLD'S LARGEST  
NETWORK; ANNOUNCES TECHNOLOGY, CAPACITY ENHANCEMENTS**

**FOR RELEASE: MONDAY, JANUARY 26, 1998**

NEW YORK – AT&T Chairman C. Michael Armstrong today announced dramatic plans to "future proof" the company's network for voice, data, image and Internet calling and surpass any other network architecture on cost efficiencies and technology.

"To meet our customers' expectations, AT&T's network needs to carry every type of traffic they want and in the capacities they want – high usage at the lowest cost – and that's what our new network architecture lets us do," Armstrong told financial analysts at a conference here today.

Under its new network architecture, AT&T will be able to handle any type of traffic a customer has, in unlimited amounts, well into the next millennium. The company says it is greatly boosting the capacity of its 40,000 route miles of fiber installed in the U.S. through a new SONET (Synchronous Optical Network) photonics technology and is providing its various voice, data and Internet networks over a common fiber transport system.

AT&T said it will be the first carrier to test and deploy a system that can carry more than 3 million simultaneous calls on a single SONET fiber. The company will be using Lucent Technologies' new WaveStar™ OLS 400G, announced today, the industry's first 80-wavelength Dense Wave Division Multiplexing (DWDM) system.

"DWDM technology – which uses light to magnify transmission – makes it possible for us to increase the transport capacity of our existing network by a factor of 10, without having to lay any additional fiber-optic cable," said Armstrong. "This enhancement alone will help save us more than \$1 billion over five years on facilities and decrease our potential SONET equipment costs by more than one-third as well as help us have a low-unit-cost architecture."

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AT&T is currently the industry leader in DWDM deployment, with more wavelength systems in service than any other long-distance carrier. In February this year, AT&T will mark a major milestone when its 1,000<sup>th</sup> DWDM system becomes operational.

AT&T is continuing to improve its low-cost network architecture, having invested some \$7 billion in its network last year alone on its SONET build-out and other improvements. The company currently has coast-to-coast connectivity with 32 large fiber rings. This year, the company will add another 20 rings, completing the three-year project and delivering transmission in any form and with sub-second emergency restoration capabilities.

Armstrong pointed out the synergies expected between AT&T's long-distance SONET rings with the smaller, local SONET rings that Teleport Communications Group has in some 66 markets across the country. "We're now completing a flexible, cost-effective build of long-haul SONET rings and when they are connected to TCG's SONET rings it would enable nationwide end-to-end connectivity from customer premises to customer premises." The company's merger with TCG is expected to be completed later this year.

The company also said it will add seven high-capacity 4ESS switches over the next two years to its base of 136 systems, which automatically route calls over AT&T's voice network. In addition, the company said to meet near-term demand it plans to add a variety of smaller, more economical and flexible local switches that can handle voice traffic initially and data in the longer term. These local edge vehicles, which sit closest to the customer on the "edge" of the network, would use and augment as necessary TCG's embedded base of switches.

AT&T has been using a similar edge vehicle architecture for its growing data network. The company plans to add some 200 edge switches to meet the astonishing growth of frame relay, ATM and Internet Protocol, or IP, services. These vehicles support our unprecedented growth in frame relay and also provide our new emerging services, such as AT&T WorldNet® Service and WorldNet Virtual Private Network Service. Daily, AT&T's network handles over 12 terabytes of switched, IP, ATM and frame relay traffic.

-more-

-3-

In addition to its new network architecture plan, AT&T plans to be able to provide business customers with ATM switches on their premises, which will allow businesses to consolidate their voice and data traffic onto fewer yet high-speed access lines. This could help businesses lower communications costs and improve their data networking readiness. AT&T said it plans to test this new approach this year.

In a related announcement today, the company said it plans to roll out AT&T WorldNet(sm) Voice, for consumers interested in the economical voice calling available over the Internet. The service will be carried over AT&T's extensive world-class IP facilities, beginning this year.

A new Network Operations Center to open late next year also is on the horizon at AT&T, Armstrong noted. The company has begun work on a state-of-the-art network management center in Bedminster, N.J., where it will consolidate oversight of all its network services – local, long distance, global, SNET, wireless and data – some of which are now managed in separate centers.

AT&T's current NOC, also in Bedminster, was built in 1986, when the network was much less complex and average daily calling volumes were some 33 million. Today, on an average business day, the AT&T network handles more than 250 million calls.

# # #



## The Internet's calling

By Matthew Broersma

January 5, 1998

**ZDNN**

There was a time -- say, a year ago -- when Internet telephony (getting voice over the Net) was the cyberspace equivalent of ham radio: none too convenient, and popular only among hobbyists.

That's started to change, according to industry experts. The entry of some big telcos into the field has added legitimacy, even as quality begins a steady improvement. At the same time, the field is likely to remain unregulated for the time being, meaning costs will stay minimal.

The upshot? Industry watchers say voice over the Internet is sounding more and more like a good idea.

Not that you're going to be using it to call your mother every weekend. The technology that started off as a gadget for sending voice communications from PC to PC has come a long way. But it still has major quality and convenience problems.

While you can now make the calls directly from telephone to telephone, with hardly any more trouble than dialing direct, through systems like the Free World Dialup II, sound quality is still poor, and IP-telephone gateways are still few and far between.

Analysts say such problems are trifles compared with the immense cost savings made possible when you circumvent the long-distance telephone network.

"Down the road, the technology will become more transparent to users, like the telephone network," said Kathy Meir, general manager of Internet Communications at Lucent. "For example, you can expect the software and hardware necessary for Internet telephony to come preinstalled on a PC or in a conventional phone. And it won't require any work on the part of users to start up or use," she added.

Two telecommunications giants, AT&T and Bellcore, showed their faith in Internet telephony's future recently with high-profile commitments.

In early December, start-up ITXC Corp., a venture backed by AT&T and Net telephony firm VocalTec Communications, launched a worldwide telephony service that is expected to go online in April. ITXC's system -- which allows ISPs, telephone companies, and other communications providers to share network and gateway architecture -- is designed to make IP phoning reach anywhere traditional telephoning can.

And Bellcore, the former research arm of the Baby Bells, launched a new business division, Soliant, to focus on IP telephony products. "We think people should expect the same level of service from the Internet as they do from the telephone network," said Soliant Product Manager Mike Giovia. "We have identified (Internet telephony) as a large growth area."

Established telcos have good reason to look into the new medium, according to industry watchers. Forrester Research estimates that as Internet telephony becomes more widespread, the telecommunications business will start to look like a money sieve, losing over \$3 billion of revenue in 2004, or more than 4 percent of the telcos' revenues.

The competition behind the scenes is also heating up. On December 22, Cisco Systems made a deal to buy LightSpeed International, a developer of technology that enables voice signals to move between circuit-switched (or traditional) and packet-switched (or IP) networks.

Analysts saw the deal as a sign of the growing rivalry between the new wave symbolized by Cisco and IP telephony, and the old-line telecommunications infrastructure.

"It is a battle royale between Cisco Systems, Lucent Technologies, and Nortel for the control of billions of

dollars of hardware and software sales when new metropolitan or long-haul telephone networks are built or upgraded," concluded Zona Research in a recent newsletter.

Some have argued that IP telephony's biggest draw, its low cost, is a short-term advantage that will disappear once the industry is regulated. Forrester disagrees, stating in a recent report that regulation will have a minimal impact in the next few years.

And at any rate, recent noises from the federal government have been against regulation. Larry Irving, the White House's point man on telecommunications told an IP telephony conference in September that the government is taking an "attitude of regulatory forbearance" to the technology.

Experts see the Internet becoming more or less seamlessly integrated into the way people use the telephone network.

Forrester, for example, predicts that in the next four years AT&T could introduce Internet telephony alongside its standard services. A possible motto: "Sounds great, less pricey."

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## Bellcore launches Internet phone initiative

By Matthew Broersma  
December 12, 1997 5:05 PM PST  
ZDNN

NEW YORK — Who better to bring Internet telephony to maturity than the people who created telephone telephony?

That's the kind of thinking behind Soliant Internet Systems, a new business division of Bellcore, the former research and development arm of the regional Bell operating companies.

Soliant, officially introduced at this week's Internet World, consolidates all of Bellcore's Internet operations, including consulting services, infrastructure, Net commerce, and custom development work. But its initial focus will be on building and delivering IP telephony products.

"We know the network, it's one thing we know very well," said Soliant Product Manager Mike Giovia at Internet World here Friday. "We have identified [Internet telephony] as a large growth area. And it's our core competency, so we feel we can be successful in that space. ... We believe no one's better positioned than we are to take advantage of that market."

Giovia said Soliant will begin rolling out products in the first quarter of 1998. While declining to name potential buyers for Net phone products, he said Soliant's aim will be to make voice and data over the Internet as reliable as voice is over the telephone network.

"Think of the telephone network. Would you put up with it if your telephone wouldn't connect every third time you picked it up? You'd be calling the telephone company all the time [to complain]," Giovia said. "We think



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people should expect the same level of service from the Internet as they do from the telephone network."

While Giovia admits that Bellcore is a "stealth company" – one that works behind the scenes – he hopes Soliant will make a difference in the way people use the Internet and the telephone network alike.

Bellcore rolled out Soliant this week at Internet World, along with a host of alliances with prominent computing and network companies. Partners include Sun Microsystems, Oracle, Select, and Netscape.

The new division is a watershed for Bellcore, which is completing a long transition from its RBOC research function to competing among a host of other networking companies. Last month, Science Applications International Corp. completed its deal to buy Bellcore from the seven RBOCs it has served since 1984.

Bellcore was created in 1984, after the AT&T breakup, to become the local Bells' equivalent of Bell Labs, which until then had carried out research and development for the entire phone system.



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## Net Telephony To Spread

By Paula Bernier  
December 9, 1997 1:58 PM PST  
[Inter@ctive Week](mailto:Inter@ctive Week)

ITXC Corp. and IPass Corp. unveiled a service that will let Internet telephony providers expand their areas of coverage and lower their costs.

Today Internet telephony service providers (ITSPs) can typically terminate calls only to locations where they own Internet telephony gateways, where they have peering relationships with one of the more than 1,000 gateway owners or where end users can receive calls over Internet telephony-enabled PCs.

With the new service, dubbed WWExchange Service, providers -- whether they own their own facilities or not -- will be able to seamlessly interconnect with other ITSPs worldwide via ITXC, which will provide least-cost routing and settlements among member providers. That will enable ITSP customers to make low-cost, long-distance calls to any destination in the world to individuals on standard telephones or Internet telephony-enabled PCs. Savings could be 50 percent to 75 percent over standard international rates.

If there is no WWExchange affiliate in a given location, ITXC will route the call via the Net to ITXC's hub in New York, where the call will then be placed onto an international public switched network connection, said Tom Evslin, the former AT&T WorldNet executive who now heads ITXC ([www.itxc.com](http://www.itxc.com)).

In the WWExchange scenario, ITXC will act as "a value-added broker of Internet telephony minutes," that will buy ITSP or standard international service on the lowest-cost route, mark it up and resell those minutes to another WWExchange affiliate at a profit, Evslin said.



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The settlements portion will be based on iPass' (www.ipass.com) settlement service.



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